

FIG.1

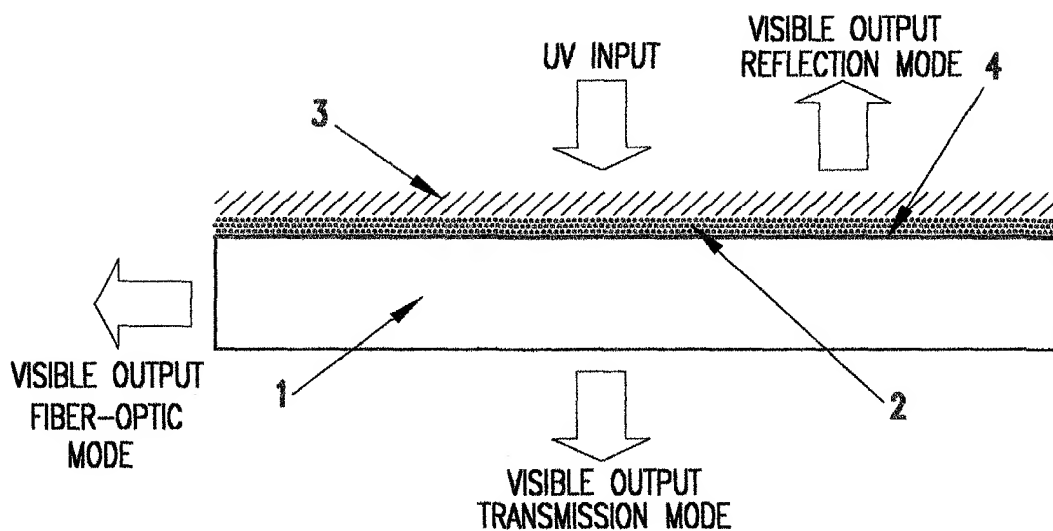


FIG. 2A

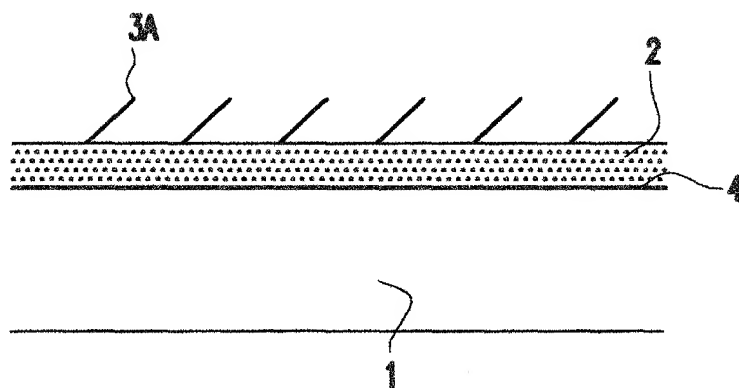


FIG. 2B

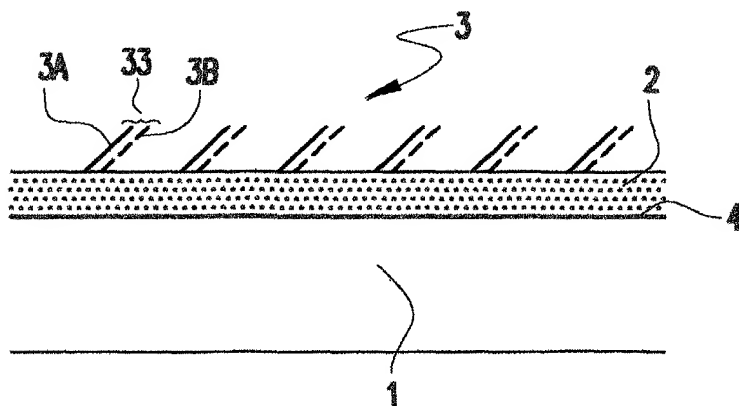


FIG. 2C

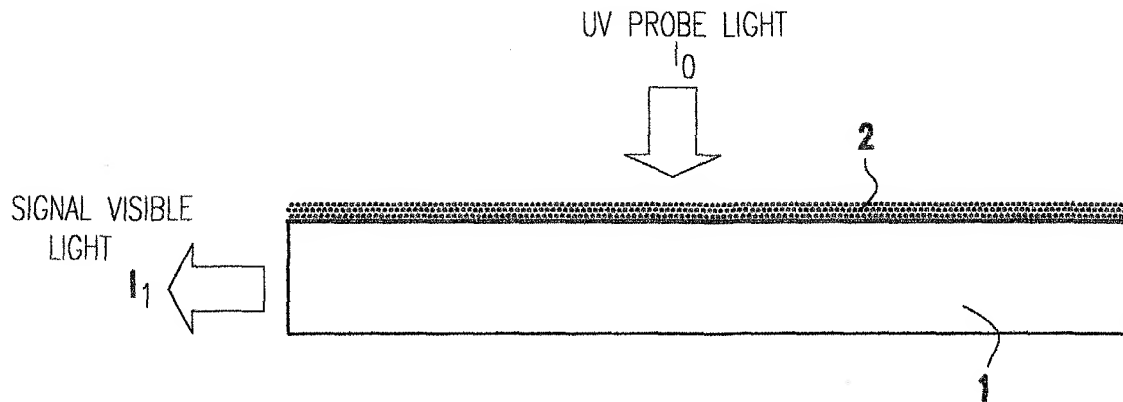


FIG.3A

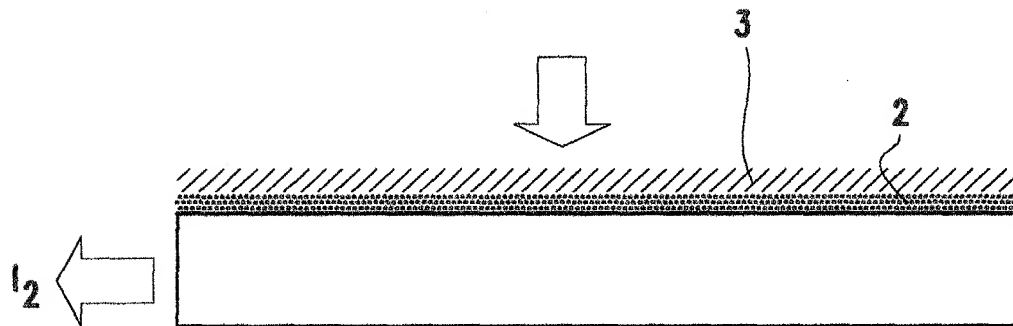


FIG.3B

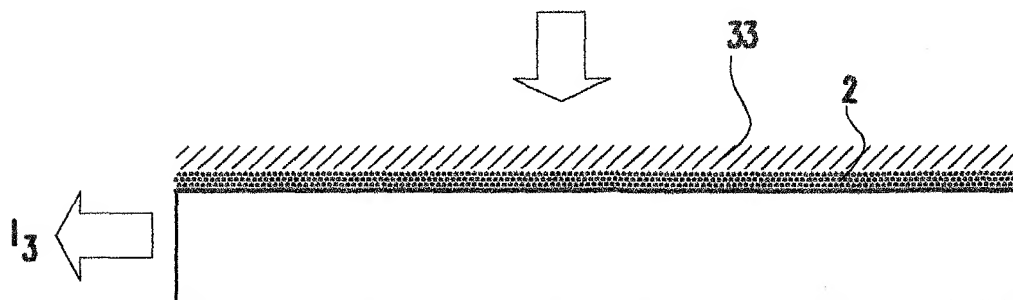
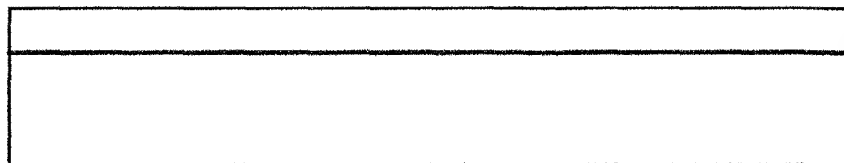
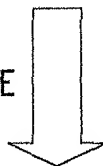


FIG.3C

FIG.4A

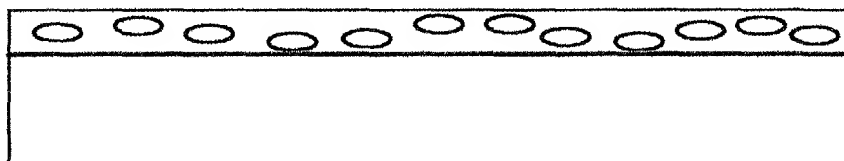


IN-SITU COMPOSITE



1. ION EXCHANGE
2. PARTICLE SYNTHESIS
3. SURFACE REGENERATION

FIG.4B

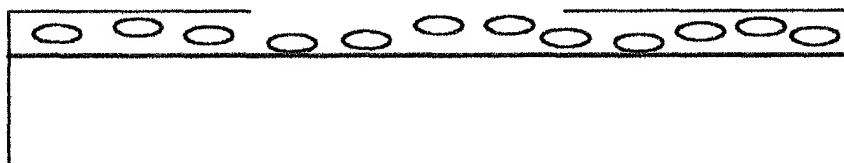


LITHOGRAPHY

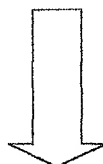


1. SURFACE MODIFICATION AT SELECTED REGIONS

FIG.4C

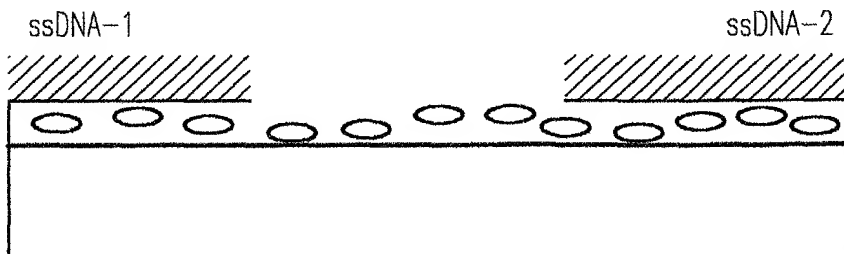


DNA GRAFTING



1. SELECTIVE ssDNA GRAFTING

FIG.4D



09670955 060101

09370336.000101

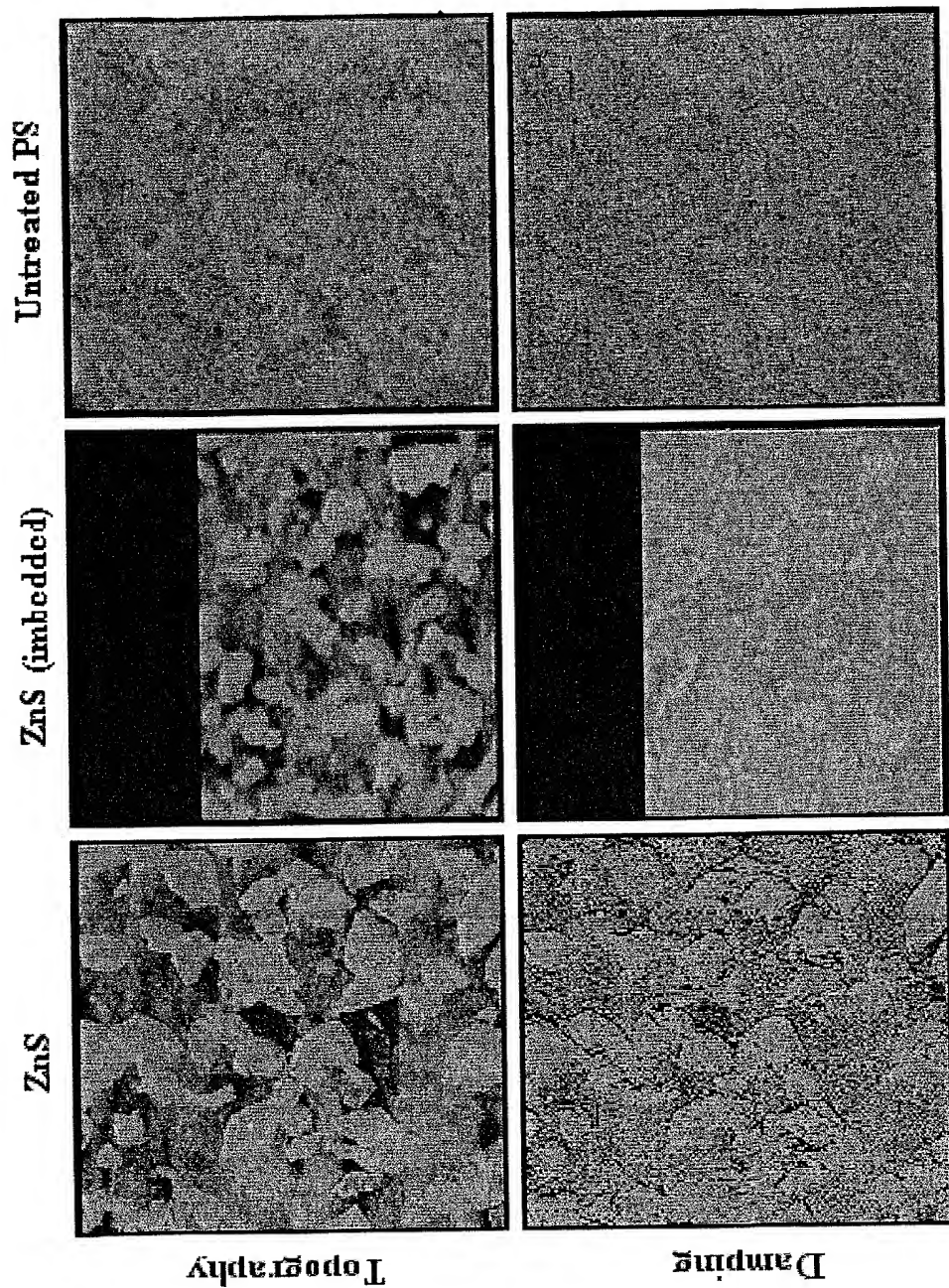


FIG.5

0370556 000101

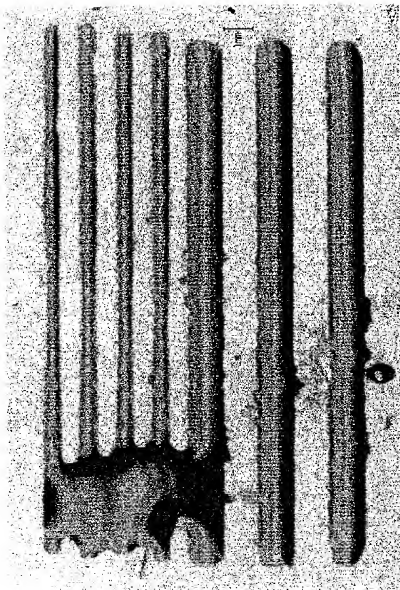
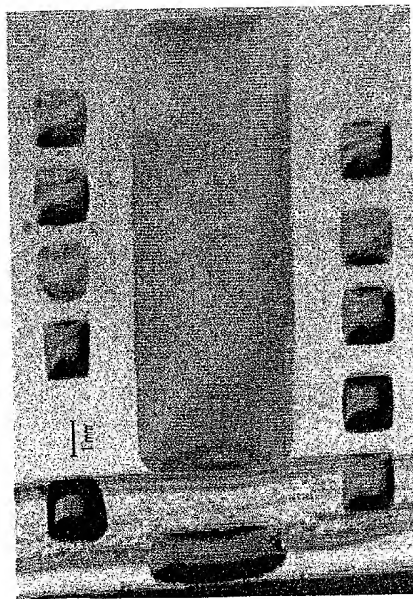


FIG.6

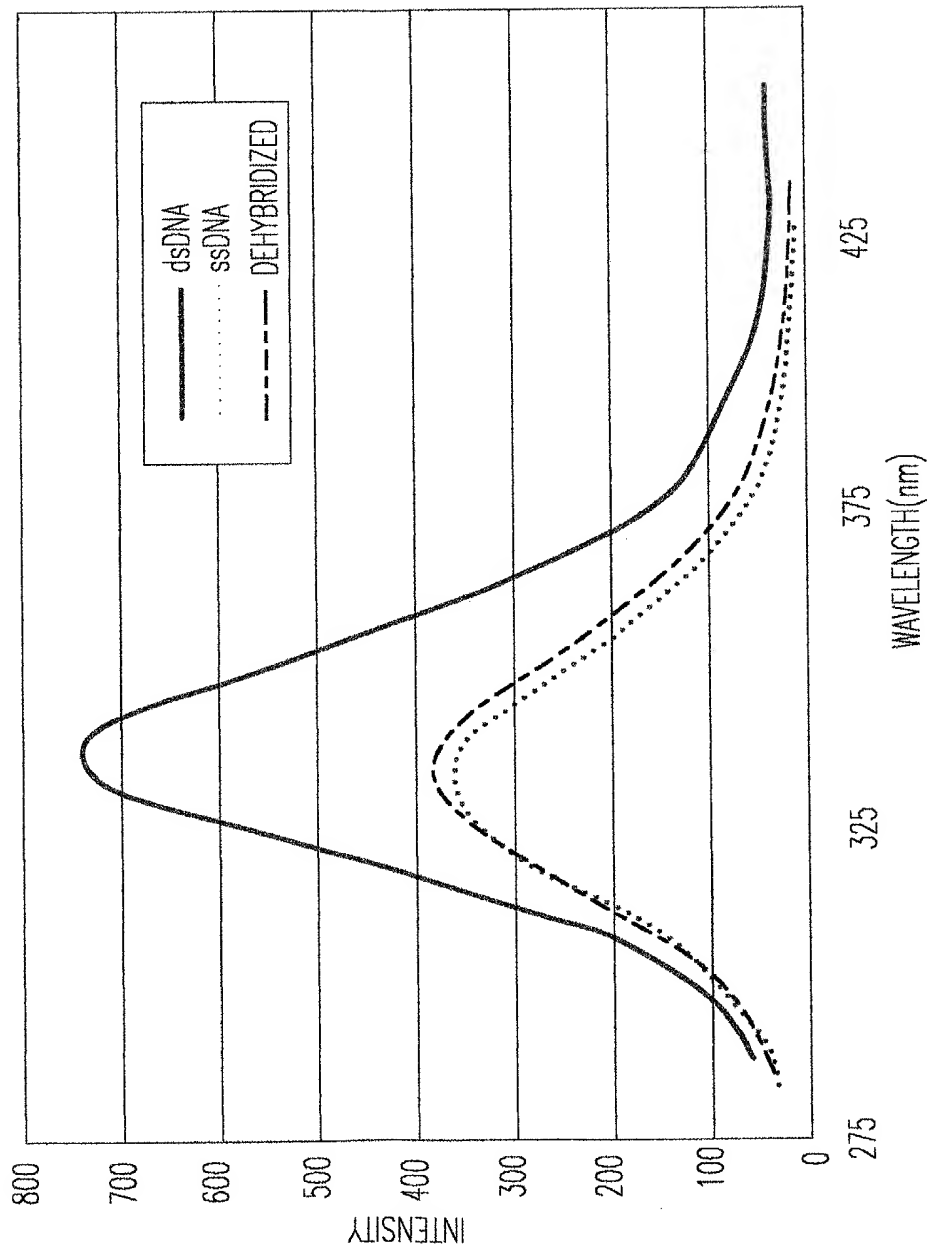


FIG.7

09670986 050104

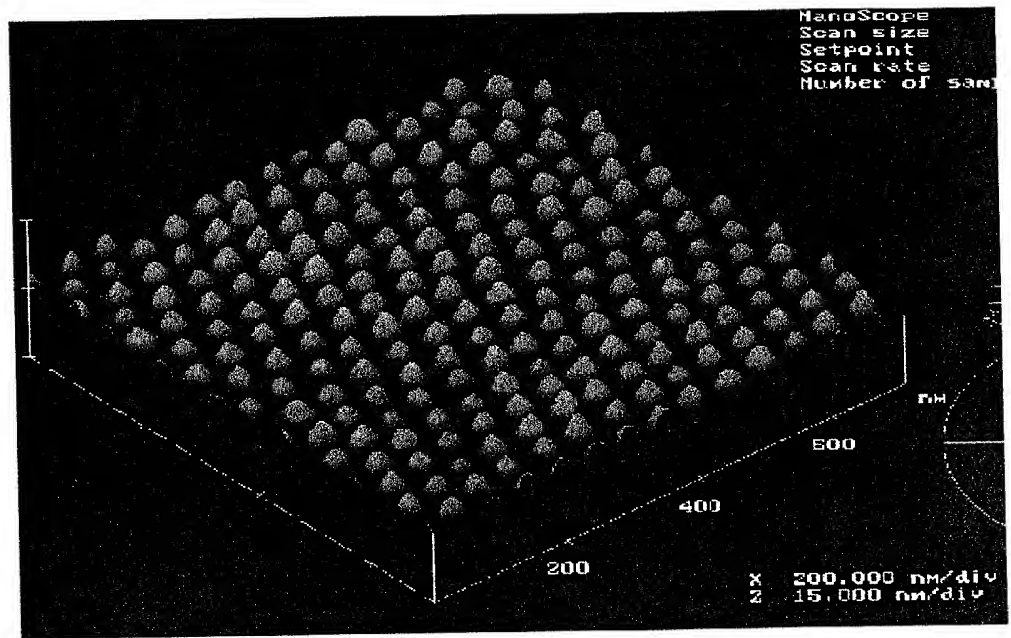


FIG.8

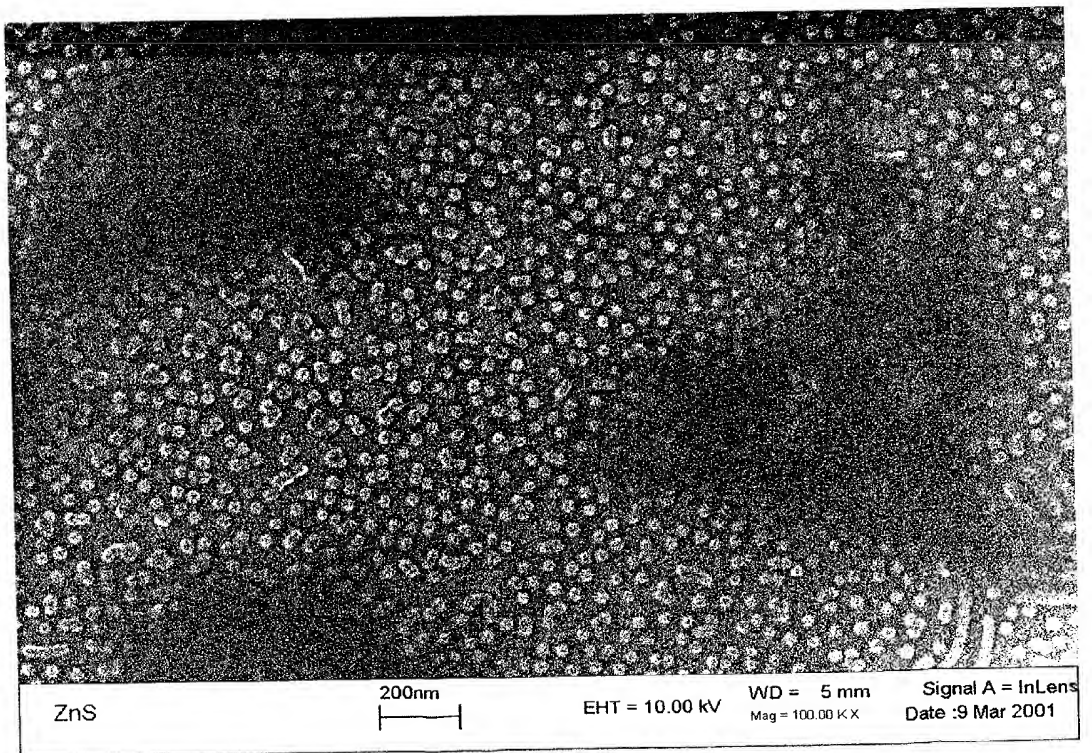


FIG.11



A line graph showing the relationship between Etching Depth (nm) on the y-axis and Time (min) on the x-axis for a 10% TMAH solution. The y-axis ranges from 0 to 14 nm with major grid lines every 2 units. The x-axis ranges from 0 to 4.5 minutes with major grid lines every 0.5 units. The curve starts at the origin (0,0) and shows an increasing etching rate over time, passing through approximately (2, 2.5), (3, 6.5), and ending at (4, 14).

TIME (min)	ETCHING DEPTH (nm)
0	0
0.5	0.5
1	1
1.5	1.5
2	2.5
2.5	4
3	6.5
3.5	10
4	14

The graph plots Advancing Contact Angle (Y-axis, 0 to 100 degrees) against Time in Seconds (X-axis, 0 to 140). Two data series are shown: Polybutadiene (represented by squares) and Polystyrene (represented by diamonds). Polybutadiene maintains a high contact angle, starting at approximately 90 degrees and slightly decreasing to about 78 degrees after 150 seconds. Polystyrene starts at 90 degrees and drops sharply to about 17 degrees by 20 seconds, then fluctuates between 13 and 18 degrees for the remainder of the test.

Time (Seconds)	Polybutadiene (Advancing Contact Angle)	Polystyrene (Advancing Contact Angle)
0	90	90
10	88	40
20	88	17
30	87	17
48	80	13
55	80	15
95	81	10
125	80	13
150	78	-

FIG. 10

EXCITATION: 260 nm

Intensity (arb. units)

100  
80  
60  
40  
20  
0

300 350 400 450 500 550 600

Wavelength (nm)

BLOCK COPOLYMER/ZnS

BULK

BLOCK COPOLYMER/ZnS

A 5x9 grid of zeros (0) enclosed in a rectangular box. A bracket on the right side of the box groups all five rows together.

FIG. 13

Variable	Mean	SD	Min	Max
Age	34.5	10.5	20	55
Gender	Male	100%		
Marital status	Married	100%		
Education	High school	100%		
Occupation	Teacher	100%		
Income	Low	100%		
Religion	Islam	100%		
Health status	Good	100%		
Smoking status	Non-smoker	100%		
Alcohol consumption	None	100%		
Stress level	Low	100%		
Life satisfaction	High	100%		
Family size	Small	100%		
Urban/rural	Urban	100%		
Health insurance	Yes	100%		
Physical activity	Low	100%		
Dietary habits	Healthy	100%		
Sleeping patterns	Regular	100%		
Work-life balance	Good	100%		
Community involvement	High	100%		
Environmental awareness	High	100%		
Volunteering	Yes	100%		
Charitable contributions	Yes	100%		
Philanthropy	Yes	100%		
Generosity	High	100%		
Compassion	High	100%		
Kindness	High	100%		
Patience	High	100%		
Forgiveness	High	100%		
Humility	High	100%		
Modesty	High	100%		
Gratitude	High	100%		
Optimism	High	100%		
Positivity	High	100%		
Resilience	High	100%		
Perseverance	High	100%		
Determination	High	100%		
Goal setting	High	100%		
Time management	High	100%		
Productivity	High	100%		
Efficiency	High	100%		
Organization	High	100%		
Planning	High	100%		
Execution	High	100%		
Completion	High	100%		
Success	High	100%		
Achievement	High	100%		
Recognition	High	100%		
Respect	High	100%		
Honor	High	100%		
Dignity	High	100%		
Self-respect	High	100%		
Confidence	High	100%		
Self-esteem	High	100%		
Self-worth	High	100%		
Self-love	High	100%		
Self-care	High	100%		
Self-improvement	High	100%		
Personal growth	High	100%		
Development	High	100%		
Progress	High	100%		
Advancement	High	100%		
Succession	High	100%		
Legacy	High	100%		
Impact	High	100%		
Influence	High	100%		
Power	High	100%		
Authority	High	100%		
Leadership	High	100%		
Management	High	100%		
Coordination	High	100%		
Communication	High	100%		
Interpersonal skills	High	100%		
Teamwork	High	100%		
Collaboration	High	100%		
Partnership	High	100%		
Relationships	High	100%		
Connections	High	100%		
Network	High	100%		
Community	High	100%		
Society	High	100%		
World	High	100%		
Universe	High	100%		
Existence	High	100%		
Life	High	100%		
Death	High	100%		
Afterlife	High	100%		
Heaven	High	100%		
Hell	High	100%		
Paradise	High	100%		
Purgatory	High	100%		
Resurrection	High	100%		
Judgment	High	100%		
Accountability	High	100%		
Responsibility	High	100%		
Obligation	High	100%		
Duty	High	100%		
Responsibility	High	100%		
Accountability				

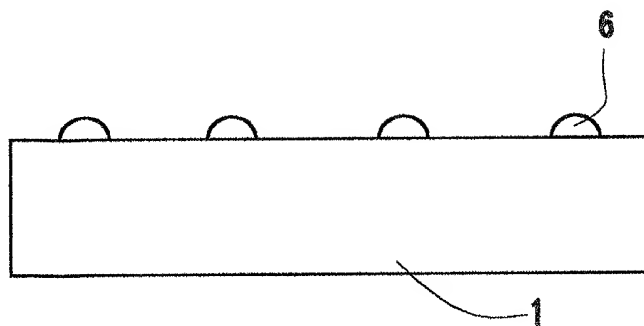


FIG. 14B

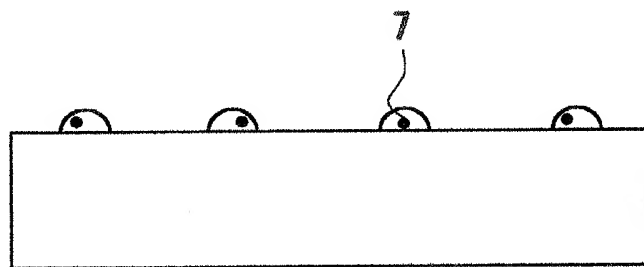
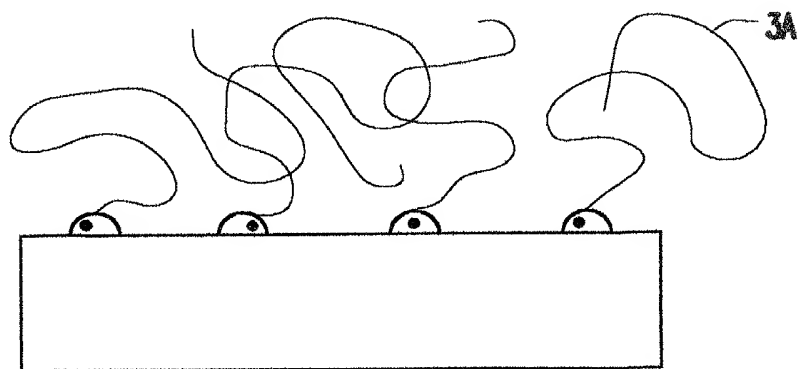


FIG. 14C



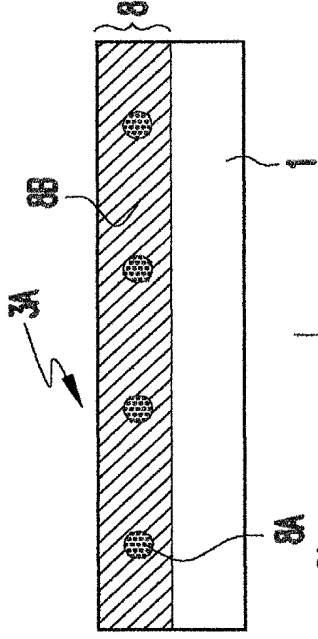


FIG. 15A

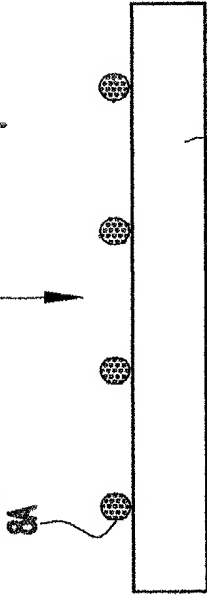


FIG. 15B

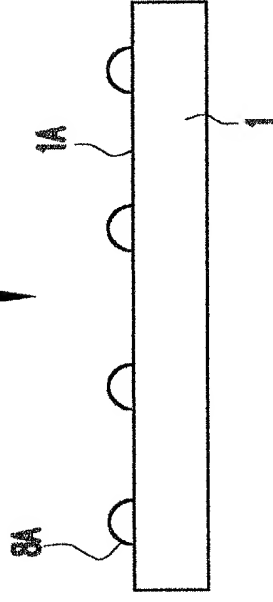


FIG. 15C

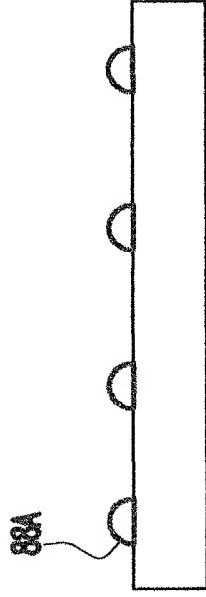


FIG. 15D

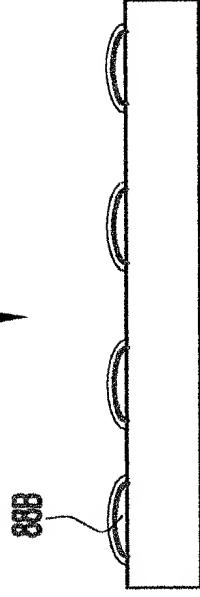


FIG. 15E

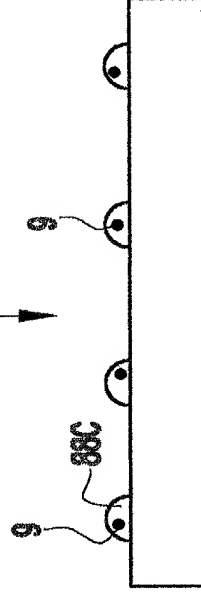
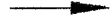


FIG. 15F

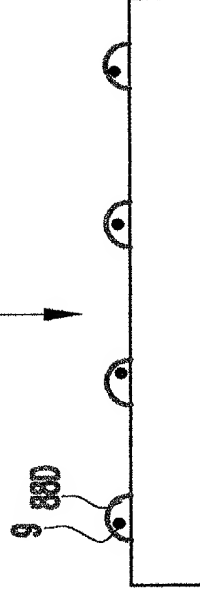
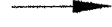
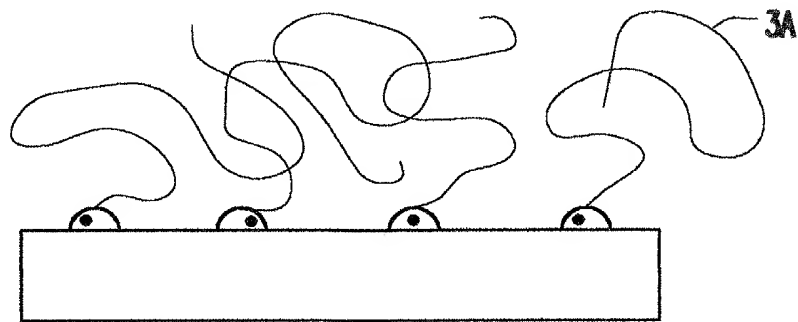


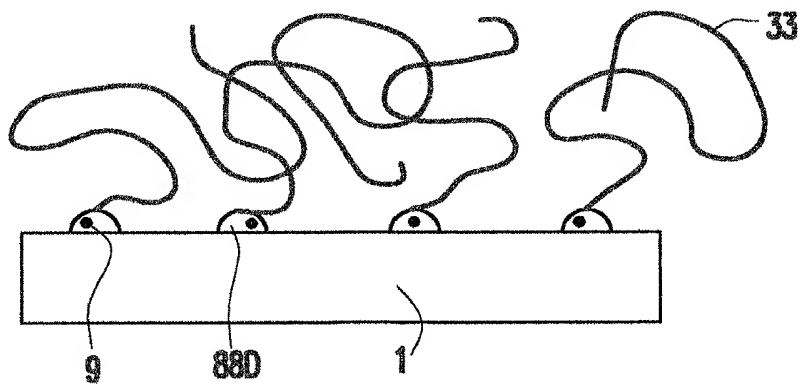
FIG. 15G

FIG.16A



HYBRIDIZATION

FIG.16B



03670990.0001

